

## CLAIMS

1.A method for the management of a resource schedule with a chosen time granularity and covering a chosen overall period (PT), each resource being capable of being divided into resource fractions, each associated with a reservation period defined at least by an initial instant, characterised in that it consists of:

a) storing said schedule in the form of a tree known as an "n-ary" tree, of order n, where n is two or more, equipped with leaves (Nj4), each representing a time interval (Tj) equal to said granularity, and with branches growing from nodes (Nji) each corresponding to a secondary period (ST) equal to the sum of the time intervals (Tj) represented by all of the leaves that are associated with it, and

b) storing in each node (Nji) known as a primary node, belonging to a set of a minimum number of nodes jointly representing a reservation period, the data representing the maximum reserved resource quantity in the corresponding secondary period (ST).

2.A method according to claim 1, characterised in that said tree is of the binary type (n=2).

3.A method according to claim 1, characterised in that in the event of a request for deletion of a resource reservation, said stored data, representing the quantities of resource reserved, are updated.

4.A method according to claim 1, characterised in that said stored data are updated with the passage of time.

5.A method according to claim 4, characterised in that said update is performed periodically.

6.A device or arrangement (D) for the management of a resource schedule with a chosen time granularity and covering a chosen overall period (PT), each resource being capable of being divided into resource fractions, each

associated with a reservation period defined at least by an initial instant, characterised in that it includes:

a) a memory (M) suitable for storing said schedule in the form of so-call "n-ary" tree, of order n, where n is  
5 two or more, equipped with leaves ( $N_{j4}$ ), each representing a time interval ( $T_j$ ) equal to said granularity, and of branches growing from nodes ( $N_{ji}$ ) each corresponding to a secondary period (ST) equal to the sum of the time intervals ( $T_j$ ) represented by all of the leaves that are  
10 associated with it, and

b) the processing means (PM) arranged to determine, for each node ( $N_{ji}$ ) known as primary, belonging to a set of a minimum number of nodes jointly representing a reservation period, the data representing the maximum  
15 reserved resource quantity in the corresponding secondary period (ST), and to send said data to said memory (M) so that they are stored within said n-ary tree.

7.A device or arrangement according to claim 6, characterised in that said tree is of the binary type  
20 ( $n=2$ ).

8.A device or arrangement according to claim 6, characterised in that said processing means (PM) are arranged in such a manner as to deliver the data representing the availability of a resource over a chosen  
25 period.

9. A device or arrangement according to claim 6, characterised in that, in the event of a request for deletion of a resource reservation, said processing means (PM) are arranged so as to update said data representing  
30 the quantities of resource reserved, stored in said memory (M).

10. A device or arrangement according to claim 6, characterised in that said processing means (PM) are arranged so as to update said memory (M) with the passage  
35 of time.

11. A device or arrangement according to claim 10, characterised in that said processing means (PM) are arranged to update said memory (M) periodically.

12. A management terminal (MT) for a network  
5 management system (NMS), characterised in that it includes a device or arrangement (D) according to any one of claims 6 to 11.